



Joint Experimentation

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Combined Joint Concept Development and
Experimentation Conference



Why are We Here?



- **CJCS JE Guidance, 9 Jan 06:** USJFCOM will “*work directly with the Services, Combatant Commands, the defense agencies, interagency, multinational partners, and the Joint Staff to develop a cohesive plan to synchronize and, when appropriate, integrate experimentation activities.*”
 - Updated R&R to CJCS JE Guidance (4 Dec 06): USJFCOM develop a JI&E Campaign Plan, covering a 3 year cycle and updated annually, that includes the minimum following elements
 - Identification of a set of prioritized joint warfighter challenges for potential JE, concept development, prototyping, or other innovative activity.
 - A schedule /calendar of JI&E Enterprise events and activities matched to specific warfighter challenges/experimentation objectives and potential solutions (when known)
 - Identification of event/activity sponsors, participants, and points of contact.
- **CJCS JE Guidance, 9 Jan 06:** USJFCOM, “*using assessments and inputs from the joint concept development and experimentation community, will recommend a prioritized set of transformational issues for JE and present these priorities to the JCS for approval prior to the beginning of each fiscal year.*”

Changed to Warfighter Challenges in 4 Dec update to JE Guidance Memo

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Warfighter Challenge Statement



The Joint Force ^{1a} does not have the capability in the area of Battlespace Awareness ^{2a} to analyze and disseminate ^{2b} time sensitive intelligence from integrated ISR assets to tactical level operators ^{1b} in a timeframe that allows rapid, effective Unified Action against Terrorists, WMD, and other time sensitive enemy targets in denied

- areas. ³
- 1. Capability Definition.**
 - 1a - Scope (Joint/MN/IA);**
 - 1b - Specific Area Investigation;**
 - 1c - Scenario/Environment (if environment/Scenario Specific)**
 - 2. Areas of Analysis/JCA Mapping**
 - 2a - JCA Tier 1**
 - 2b - JCA Tier 2**
 - 3. Strategic Guidance**

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WFC Prioritized List

ID	I.V	Short Title	WFC Problem Statement
C1		Lift Capability	The JFC requires the capability to leverage sufficient inter/intra-theater lift for the rapid delivery, repositioning, or reconfiguring forward deployed forces to meet changing mission requirements and resources throughout the full range of operations in support of R/WOT/G/WOT and TSC operations.
C2		Logistics Tracking and Visibility	The JFC requires Intransit visibility of distribution activities to sufficiently meet the needs of the warfighter. Stakeholders throughout the distribution process currently do not have the ability to determine shipment status through system access or event management. ITV is not adequately supported and often requires manual workarounds due to disparate systems, lack of awareness, access, and training. There needs to be visibility of all cargo from the point of loading to the point of offloading, especially when crossing Areas of Responsibility (AOR). This lack of visibility limits the issuing activity's ability to respond to routine customer requests for updated shipment information in a timely manner.
C3		Joint, Interagency, Multinational Interoperability	The JFC requires interoperability among all conventional forces, special operations forces, other government agencies, law enforcement agencies, and multinational partners in order to conduct preventive, preemptive, or reactive counterterrorism operations and other security and forward presence operations.
C4		Maritime Crisis Respons	DOD and DHS require a methodology for aligning limited USCG capabilities and forces for geographic CDR warfighting, maritime HD and HS, as well as other (maritime safety, aids to navigation), etc. requirements.
C5		Interagency and Multinational Operations in Irregular Warfare	The JFC requires the capability to monitor and coordinate with interagency and multi-national operations to support the component's distributed units engaged in the 3-block war to empower to operate across political, economic, social, and military functions to defeat insurgents and assist the establishment of governance.
C6		PMESII	The JFC requires the capability to exchange, process, and disseminate relevant tactical and operational information that includes political, economic, and social knowledge in order to conduct effective operations to counter irregular threats.
C7		Combat Target ID	The Joint Force Land Component requires in the area of Battlespace Awareness the capability to provide real time combat ID with automated joint sensor integration, provide a single battle command system and provide Common Operational Picture for mounted and dismounted

Identify "What" Joint Issues you want to investigate

Identify which of these Issues / Challenges are most important or most pressing

WFC Prioritized

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C7		Combat Target ID	The Joint Force Land Compot Awareness the capability to prc joint sensor integration, provid provide Common Operational

Focus Areas for II&E CPLAN

Top 20% Warfighter Challenges (Aligned to J CAs)

• Force Management

- Agile Future Combat Force - Global
- Force Agility MCO - SSTRO - Transition
- Joint Force Modularity and Basing - Reinforcement

• Battlespace Awareness

- CWMID ISR
- Urban Detection and Tracking
- Future Global Indications and Warning - ISR
- Persistent ISR for Forcible Entry
- Adaptive Intel for SSTRO

• Command and Control

- Flexible Crisis Response C2 - Joint, IA, & MN

• Net-Centric Operations

- Interagency Common Operational Picture

• Interagency / IGO / NGO / Coordination

- *Architecture for Unified Action*

• Logistics

- Adaptive Lift Capabilities - Employment
- Joint Logistics Re-engineering
- Rapid Deployment Planning and Execution

• Defense Support of Civil Authorities

- *Improve Joint Force Ability to Support Civil Authorities*

• Homeland Defense

- Improving Interagency C2 for Disaster Response
- Protection of Homeland Critical Infrastructure
- Operational Maritime Domain Awareness

• Shaping

- *Informing and Influencing Perceptions*

• Stability Operations

- *Military Support to Stability Operations*

• Information Operations

- *Information Operations Integration and Assessment*

• Special Operations & Irregular Warfare

- Conducting Distributed Maneuver - Irregular Operations

• Land Operations

- Integrating Kinetic & Non-Kinetic Fires/Forces - Lethal effects

Of the identified prioritized Issues / Challenges, which ones do you need to focus on for the next CPLAN?

Issues / Challenges aligned with Joint Capability Areas (JCA's) to facilitate linkage to acquisition process and long term tracking of the issue



WFC Prioritized

Focus Areas for JI&E CPLAN Top 20% Warfighter Challenges (Aligned to J CAs)

Force Management

- Agile Future Combat Force - Global
- Force Agility MCO - SSTR0 - Transition

Logistics

- Adaptive Lift Capabilities - Employment
- Joint Logistics Re-engineering

WFC: Current Activities / Potential Solutions

Challenge: Architecture for Unified Action

The Joint, IA, MN, IGO, NGO community requires an architecture that provides structures, processes, and capabilities for planning, coordination, execution and assessment of operations to rapidly achieve the desired effects through a unified effort by all mission

Potential Solutions

Cross-Domain Collaborative Information Environment
MN IA & NGO Information Flow
Coalition Shared Intelligence Network Environment
USG Handbook on Stabilization and Reconstruction
USG Planning Process
Multinational Interagency Group Process
Scenario-based USG planning tool (Horizon)

Lead Organizations

J FCOM, J 9
J FCOM, J 9
EUCOM
J FCOM, J 9
J FCOM, J 9
J FCOM, J 9
J FCOM, J 9

What is the "Health" of the WFC?

Joint Capability Area	Warfighting Challenge		FY 07 Solution Health	FY 07 Exp Health	COCOM Customers										Services					Spectrum of Conflict (J OCs)					
					CENTCOM	PACOM	EUCOM	SOUTHCOM	SOCCOM	NORTHCOM	TRANSOM	JFCOM	STRATCOM	JSA	JSAP	JSCG	JSMC	JBIN	SHAPING	DETERRENCE	MCO	REGULAR	STRO	LD/CS	
Joint Interagency / IGO/ NGO/ Coordination	Architecture for Unified Action	M																							

Good coverage

Limited coverage

Direct submission from COCOM, service, or agency

Mission benefit from solution

Challenge matches an identified J OpsC gap

Challenge is likely to appear as an identified I OpsC gap

Good coverage

Limited coverage

Direct submission from COCOM, service, or agency

Mission benefit from solution

Challenge matches an identified J OpsC gap

Challenge is likely to appear as an identified J OpsC gap

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Activities	Leads
Urban Resolve 2015			Trident Warrior 07			MNE 5 Minor Integrating Event						Argentine-US CME	SOUTHCOM
Argentine - US Crisis Management Experiment			Unified Action 07									Urban Resolve 2015	J FCOM, J 9
												Unified Action 07	J FCOM, J 9
												MNE 5 Minor Integ Event	J FCOM, J 9
												Trident Warrior 07	USN
												J IOC-X ISR Synch 07	J FCOM, J 9
												Shaping J OC	EUCOM/J FCOM
												Cobra Gold 07	PACOM
												Bright Star 07/08	CENTCOM

Focus Areas for JI&E CPLAN
Top 20% Warfighter Challenges (Aligned to J CAs)

WFC Prioritized

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C7		Combat Target ID	The Joint Force L... Awareness the cap... joint sensor inter... provide Common	

- **Force Management**

- Agile Future Combat Force - Global
- Force Agility MCO - SSTRO - Transition
- Joint Force Modularity and Basing - Reinforcement

- **Battlespace Awareness**

- CWMD ISR
- Urban Detection and Tracking
- Future Global Indications and Warning - ISR
- Persistent ISR for Forcible Entry
- Adaptive Intel for SSTRO
- **Command and Control**

- **Flexible Crisis Response**

- **Net-Centric Operations**

- Interagency Common Op

- **Interagency / IGO / NGO / Coordination**
 - **Architecture for Unified Action**
 - **Establishing Unity of Effort in Coalition Operations**
 - **Facilitating Interagency Integration - Terrorism**
 - **Multinational Force Interoperability**
 - **Conducting Comprehensive MN, Interagency, & NGO Operations**

- Protection

- Defeating WMD Delivery Systems
- Force Protection Against Terrorist Acts
- Battlespace Security
- Detect and Track Nuclear Materials

- Logistics

- Adaptive Lift Capabilities - Employment
- Joint Logistics Re-engineering
- Rapid Deployment Planning and Execution
- **Defense Support of Civil Authorities**
 - *Improve Joint Force Ability to Support Civil Authorities*
- **Homeland Defense**
 - Improving Interagency C2 for Disaster Response
 - Protection of Homeland Critical Infrastructure
 - Operational Maritime Domain Awareness
- **Shaping**
 - *Informing and Influencing Perceptions*
- **Stability Operations**
 - *Military Support to Stability Operations*
- **Information Operations**
 - *Information Operations Integration and Assessment*
- **Special Operations & Irregular Warfare**
 - Conducting Distributed Maneuver - Irregular Operations
- **Land Operations**
 - Integrating Kinetic & Non-Kinetic Fires/Force to obtain Non-Lethal effects

End State: Joint I&E Campaign Plan

WFC: Current Activities / Potential Solutions

Year CPLAN (with WFCs aligned to Events/Activities)

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
Urban Resolve 2015						Trident Warrior			MNE 5 Minor	
WFC's Linkage to Joint Experiments and Research Questions / Objectives						Unified Action 07	Integrating Event		Create New Event (if Needed)	
<u>Challenge 1:</u> It is often difficult to craft agreed and achievable guidance at the strategic level for all government actors, particularly in a coalition environment. 1.1: How do we establish agreed and achievable strategic guidance in a coalition environment? 1.2: What should be included in a comprehensive strategic guidance? 1.3: Who should be part of the strategic planning process? 1.4: How do we reach consensus on the end state and strategic objectives of a coalition?						OC-X	ISR Synchronization 07			
<u>Challenge 6:</u> A common challenge for civilian and military organizations is the measurement of results on the ground and evaluation or assessment of progress toward goals. Many organizations lack sufficient internal methods to evaluate how their plans are progressing, thereby making it even more difficult to implement shared multi-organization solutions. 6.1: How do we measure results and use those measurements at the operational and strategic levels to assess progress toward achieving the desired end state? 6.2: How do we design compatible approaches to assessment across interagency and multinational organizations to facilitate coordinated decision-making during the execution of interventions? 6.3: Which interagency organizational structures can be most effective in facilitating coordinated assessment during the execution of interventions across interagency, international, non-government and multinational organizations? 6.4: How can we improve our understanding of the cultures of other organizations? 6.5: How can we improve our understanding of the practices of other organizations?						07		Bright Star 07/08		

Challenge: Architecture for Unified Action

The Joint, IA, MN, IGO, NGO community requires an architecture that provides structures, processes, and capabilities for planning, coordination, execution and assessment of operations to rapidly achieve the desired effects through a unified effort by all mission partners.

Architecture for Unified Action Selected Solutions

- Cross-Domain Collaborative Information Environment
- MN IA & NGO Information Flow
- Coalition Shared Intelligence Network Environment
- USG Handbook on Stabilization and Reconstruction
- USG Planning Process

Lead Organizations

- JFCOM, J9
- JFCOM, J9
- EUCOM
- JFCOM, J9
- JFCOM, J9
- JFCOM, J9
- JFCOM, J9

COCOM Customer Services

Spectrum of Conflict (OCS)

Legend:

- Good coverage
- Limited coverage
- Direct submission from COCOM, service, or agency
- Mission benefit from solution
- Challenge matches an identified J OpSc gap
- Challenge is likely to appear as an identified J OpSc gap

Campaign Plan

WFC Prioritized

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C3				
C4				
C5				
C6				
C7		Combat Target ID	The Joint Force Land Component requires in the area of Battlespace Awareness the capability to provide real time combat ID with automated joint sensor integration, provide a single battle command system and provide Common Operational Picture for mounted and dismounted	

Focus Areas for JI&E CPLAN

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- **Force Management**

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- Joint Force Modularity and Basing - Reinforcement

ISR

- **Logistics**

- Adaptive Lift Capabilities - Employment
 - Joint Logistics Re-engineering
 - Rapid Deployment Planning and Execution
- Defense Support of Civil Authorities**

- **Defense Support of Civil Authorities**
 - *Improve Joint Force Ability to Support Civil Authorities*

- **Homeland Defense**

- Improving Interagency C2 for Disaster Response
- Protection of Homeland Critical Infrastructure
- Operational Maritime Domain Awareness

HOW Do You Prioritize?

- **Open / transparent processes**
- **Includes both informal and formal collaboration / staffing**
- **Inclusive - What is important to the JCDE community members and DoD**
- **Governance and Oversight -- Final Arbitrator / Decision Authority**

Year CPLAN (with WFCs aligned to Events/Activities)

OCT **NOV** **DEC** **JAN** **FEB** **MAR** **APR** **MAY** **JUN** **JUL** **AUG**

Urban Resolve 2015

Trident Warrior

WFC's Linkage to Joint Experiments and Research Questions / Objectives

Challenge 1: It is often difficult to craft agreed and achievable guidance at the strategic level for all government actors, particularly in a coalition environment.

- 1.1: How do we establish agreed and achievable strategic guidance in a coalition environment?
- 1.2: What should be included in a comprehensive strategic guidance?
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Unified Action 07

MNE 5 Minor Integrating Event

Create New Event (if Needed)

OC-X ISR Synchronization 07

Bright Star 07/08

WFC: Current Activities / Potential Solutions

Challenge: Architecture for Unified Action

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- EUCOM
- JFCOM, J9
- JFCOM, J9
- JFCOM, J9
- JFCOM, J9

USG Planning Process

Multinational Interagency Group Process
 COCOM Customers Services
 Scenario-based Ops planning tool (WinZion)

Spectrum of Conflict (SOCs)

Joint Capability Area

Warfighting Challenge

FY 07 Solution Health

FY 07 Exp Health

Joint Interagency / IGO/ NGO/ Coordination

Architecture for Unified Action

Legend:

- Good coverage
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- Challenge is likely to appear as an identified J Opac gap

Timeline: OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP

Activities:

- Urban Resolve 2015
- Argentine - US Crisis Management Experiment
- J IOC-X ISR Synchronization 07
- Shaping J OC
- Cobra Gold 07
- Bright Star 07/08
- MNE 5 Minor Integrating Event
- Unified Action 07

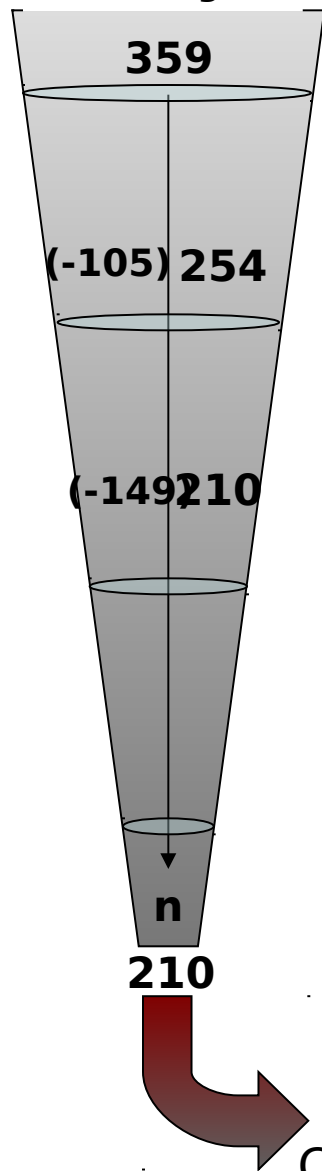
Leads:

- SOUTHCOM
- JFCOM, J9
- JFCOM, J9
- JFCOM, J9
- USN
- JFCOM, J9
- EUCOM/FCO M
- BAGCM



Joint
Warfighting
Challenges

Prioritization Process



Screen

Separate challenges from concerns
Eliminate those with limited joint value
or lacking experimentation potential

Consolidate

Combine similar challenges into similar
focus groupings (reduce redundancies
and identify potential synergies)

Map to JCAs

Prior

Community collective assessment of the

We have a Process

• Can we execute better / Improve?

ID criticality of Challenge

Add weighted modifiers

- Higher tasking
- MPMI relevance
- Level of war
- JOpsC gap
- Multiple COCOM interests

Conduct Sensitivity Analysis

Analyze Results (Review and Refine)

***Criteria will change as
process refined***

***Weights will change based
on Sensitivity Analysis and
feedback***

***Closer alignment to /
leverage of existing
processes***

Combined Joint Concept Development
Experimentation Conference



Prioritization Process - Time Line

PHASE:

I

- Collect
- Screen
- Combine

II

- Informal Collaboration
AO / O6 Level
(Web Based)

III

- Formal Input / Collaboration
Go/FO Level
(JS136)

IV

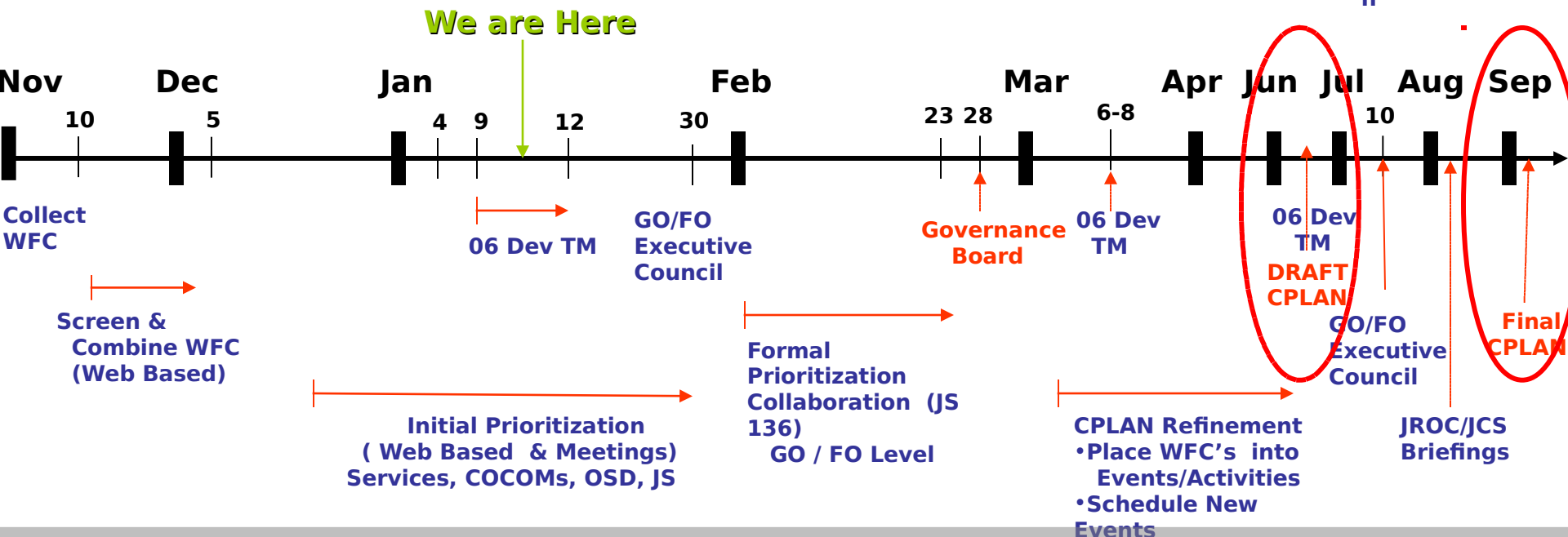
- Adjudication / Governance Board

V

- CPLAN Refinement

VI

- CPLAN Approval & Publication



We can not slip development any further to right!
development timeline with future guidance and requirements processes whenever possible

Combined Joint Concept Development and
Experimentation Conference



Questions?

Combined Joint Concept Development and
Experimentation Conference



FF 08 Prioritization Criteria



$$JWC \text{ Value} = IV + 2/3 A + B + 1/3 C + D + E$$

- **(IV) = Initial Value of the Challenges (Weight 1)**

- Critical Contribution = 5
- Immediate Contribution = 3
- Incremental Benefit = 1

Maximum possible value 9.0

Minimum possible value is 1.0

- **(A) = Tasking (Weight 2/3)**

- Specified task or mission stated within a DOD directive of higher strategic guidance = 2/3

- **(B) = MPMI (Weight 1)**

- Directly related to an MPMI = 1
- Directly related to a Additional Issues Requiring Assessment = 1/2

- **(C) = Level of War (Weight 1/3)**

- Operational = 1/3

- **(D) = Identified JOpsC gap (Weight 1)**

- Warfighter need specifically stated = 1

- **(E) = WFC submitted by multiple COCOM, Service or Agency (Weight 1)**

- WFC exists in 3 or more C/S/A = 1